## **REMARKS**

Claims 1-9 are pending and stand rejected. Specifically, claims 1-9 were rejected under 35 U.S.C. §103 over U.S. Patent No. 6,185,205 to Sharrit ("the Sharrit reference") in view of U.S. Patent No. 5,673,253 to Shaffer ("the Shaffer reference"). The Applicants traverse the rejections for the reasons stated below.

Amended claim 1 recites an apparatus that routes data from an external source to an end-user device. The end-user device originates the data transfer to itself by issuing a data request to the external source. The Applicants' system determines the means for executing the data request on the basis of the external source and the available bandwidth for each of the external bandwidth channels that connect the external source to the apparatus. After the path is determined, the data is first carried to the apparatus via the external bandwidth channels and then routed via a switch at the apparatus to the end-user device.

The Office Action asserted that Sharrit teaches an end-user device (separate from the apparatus) that originates a data request and receives the requested data as recited in claim 1. The Applicants disagree with this assertion for the following reasons. The Sharrit reference teaches a system where data is exchanged between wireless systems (via antennas 25a, 25b, and 25c) and wired systems 28a, 28b, and 28c. Sharrit, col. 4, lines 18-45. A user device 34 programs a switch 16 that routes data from a particular source to a particular destination. *Id.* Specifically, Sharrit notes that "the controller 18 receives connection instructions from a user of the ITS 10 via a user device 34." *Id.* at col. 4, lines 25-27. In fact, there is no teaching or suggestion that the user device 34 is anything more that a switch programming tool and no teaching or suggestion that the user device 34 receives any data. Consequently, since the above-mentioned elements of claim 1 are not taught or suggested by the Sharrit reference, it is believed that claim 1 is allowable over the proposed combination.

The Office Action also admitted that Sharrit fails to teach the dynamic allocation of bandwidth as recited in claim 1. However, the Office Action stated that Shaffer included this teaching and "it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Shaffer into the system of Sharrit to dynamically monitor home network devices and assign bandwidth dynamically based upon requests made by each device, in order to efficiently make use of the available bandwidth." The

Applicants disagree with this assertion for the following reasons.

Specifically, in Sharrit, external stimuli (e.g., user input or information included in the data) control the switch 16. *Id.* The Sharrit system is not concerned about the physical (e.g., bandwidth) characteristics of the communication channels and relies exclusively upon this external input to control the switch 16.

On the other hand, in Shaffer, the resource utilization of various communication channels is analyzed. Shaffer, col. 6, lines 10-19. Bandwidth reallocation can then be performed based upon the resource utilization analysis. *Id*.

As stated in the MPEP, there must be some suggestion or motivation in the references themselves or generally available to one skilled in the art to make the combination/modification. In addition, the references cannot teach against the combination/modification. See MPEP §§2142-3 and 2145.

In the present case, the user-input based routing scheme of Sharrit is exactly the opposite of the resource utilization-analysis based routing scheme described in Shaffer. Sharrit includes no suggestion to alter its user-input based routing scheme to a scheme based upon an analysis of channel characteristics. In fact, there is no suggestion in Sharrit that bandwidth utilization is ever a concern. Since the routing schemes in Sharrit and Shafer are exact opposites of each other, there is a motivation *not* to make the change and, consequently, the proposed modification is implicitly taught against. Therefore, it is believed that the proposed combination/ modification is improper and claim 1 is allowable for these additional reasons.

Claim 6 includes similar recitations as those made in claim 1. It is believed that claim 1 is allowable for the same reasons given above with respect to claim 1. The remaining claims depend directly upon claims 1 and 6. Since claims 1 and 6 are allowable, it is believed that the remaining claims are also allowable.

The Commissioner is hereby authorized to charge any additional fees which may be required in this application to Deposit Account No. 06-1135.

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Respectfully submitted,

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